

FIG. 2A



APPROVED O.G. FIG.
BY OLASS SUI

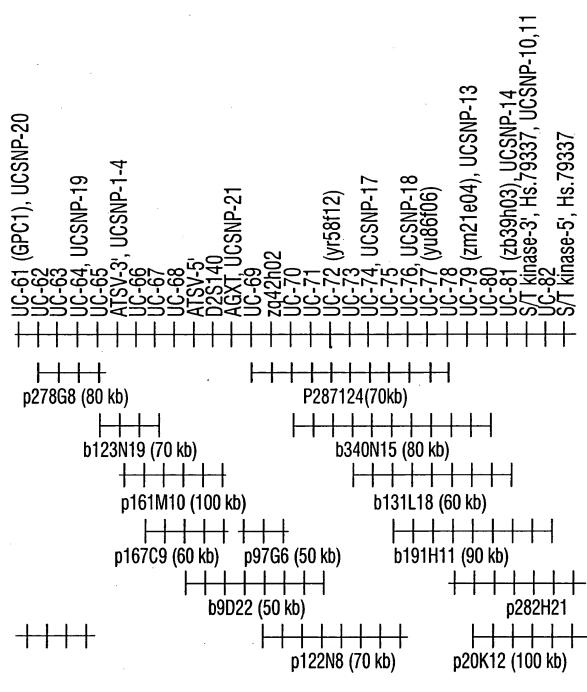


FIG. 2B





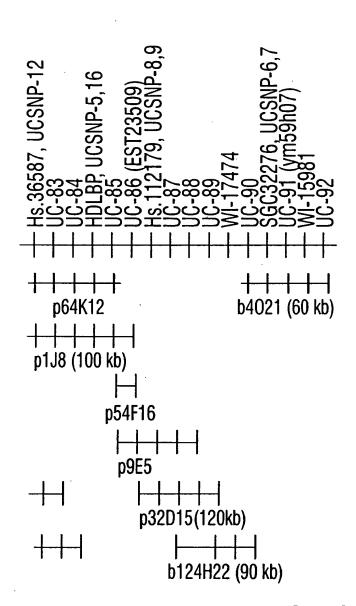
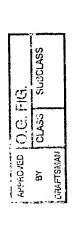
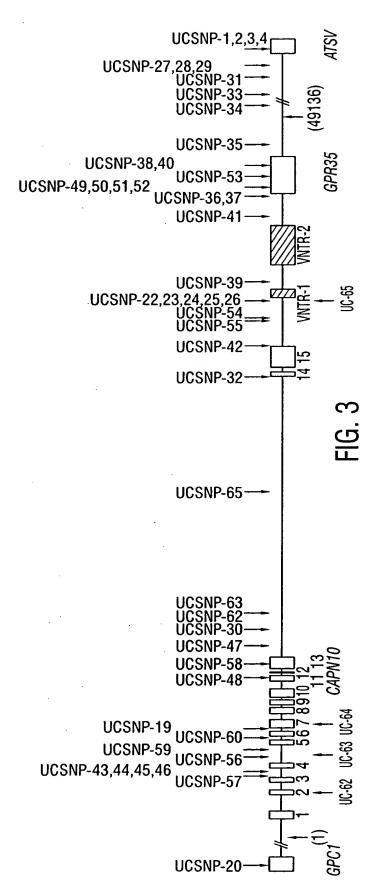


FIG. 2C







APPHOVED O.G. FIG.
BY CLASS SUBCLASS
CRAFTSMAN

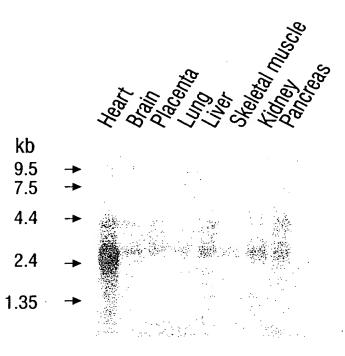


FIG. 4



HOULD (D.C. FIN.).
BY CLASS SUBCLASS
TSMAN

hCAPN5
MFSCVKPYEDQNYSALRQDCRRRK'
MVDVVIDERLPTVNNQLIYCHSNSI
RKVRLGHGLLAFFKSEKLDMIRLRI
QYIFEVKKPEDEVLICIQQRPKRS'
VTQVHVLGAAGLKDSPTGANSYVI:

mCAPN6
MGPPLKLFKNQKYQELKQECMKDGI
EWTEVVIDDLLPTINGDLVFSFST:
IRKLRLGERLVEVFSTEKLYMVRLI
IFTVPEDGHKVIMSLQQKDLRTYRI
VTQITVHSAEGLEKKYANETVNPY:

hCAPN3
MPTVISASVAPRTAAEPRSPGPVPI
WFLAAIACLTLNQHLLFRVIPHDQ:
GSLMGCSIDDGTNMTYGTSPSGLNI
QHQVTEDGEFWMSYEDFIYHFTKLI
KQHLQKDFFLYNASKARSKTYINMI
QESEEQQQFRNIFKQIAGDDMEIC;
MNIDFDSFICCFVRLEGMFRAFHAI

FIG. 5A





A'FROLL F.C. F.C. BY CLAUS SUBCLASS

VLFEDPLFPATDDSLYYKGTPGPAV RNEFWCALVEKAYAKLAGCYQALDG NPWGEREWNGPWSDTSEEWQKVSKS TRREGKGENLAIGFDIYKVEENRQY IKCEGDKVRSAVQKGTSTPEYNVKG

RLFCDPTFLPENDSLFFNRLLPGKV SMNEFWNALLEKAYAKLLGCYEALD RNPLGRQEWSGPWSEISEEWQQLTV RMGRPDNYIIGFELFKVEMNRRFRL LIIKCGKEEVRSPVQKNTVHAIFDT

HPAQSKATEAGGGNPSGIYSAIISR
SFIENYAGIFHFQFWRYGEWVDVVI
MGELIARMVRNMDNSLLQDSDLDPR
EICNLTADALQSDKLQTWTVSVNEG
REVSQRFRLPPSEYVIVPSTYEPHQ
ADELKKVLNTVVNKHKDLKTHGFTL
FDKDGDGIIKLNVLEWLQLTMYA 8

FIG. 5B



BY CLASS SUCCLASS

RWKRPKGICEDPRLFVDGISSHDLH GNTADALVDFTGGVSEPIDLTEGDF EREKMGVTVQDDGEFWMTFEDVCRY RMHSLQHKAASSIYINSRSVFLRTD IFYRKKLSQPITVQVWNHRVLKDEF

VWKRPQDISDDPHLIVGNISNHQLI GLTITDIIMDFTGTLAEIIDMQKGR TDRKNLGLVMSDDGEFWMSLEDFCH HHLYIQERAGTSTYIDTRTVFLSKY QAVFYRRTTDIPIIIQVWNSRKFCD

NFPIIGVKEKTFEQLHKKCLEKKVL DDCLPTYNNQLVFTKSNHRNEFWSA GSDERPTRTIIPVQYETRMACGLVR RWVRGCSAGGCRNFPDTFWTNPQYR EGEFILRVFSEKRNLSEEVENTISV ESCRSMIALMDTDGSGKLNLQEFHH 21





QGQVGNCWFVAACSSLASRESLWQK ANDETKRNQLFERMLKVHSRGGLIS FTDIIKCRVINTSHLSIHKTWEEAR QPEGRYVIIPTTFEPGHTGEFLLRV LGQVHLKADPDNLQALHTLHLRDRN

QGRLGNKAMISAFSCLAVQESHWTK YTDLVEEKYKLFGELYKTFTKGGLI NFHKLNVCRNVNNPVFGRKELESVV LKKGSYVLVPTMFQHGRTSEFLLRI QFLGQVTLDADPSDCRDLKSLYLRK

YVDPEFPPDETSLFYSQKFPIQFVW LLEKAYAKLHGSYEALKGGNTTEAM GHAYSVTGLDEVPFKGEKVKLVRLR LKLLEEDDDPDDSEVICSFLVALMQ DRPVKKKKTKPIIFVSDRANSNKEL LWNKIKAWQKIFKHYDTDQSGTINS





พ.ค.ส.ส.ธ.ม ก. ต. ค.ศ. ค.ศ. BY CLASS SUBCLASS VIPDWKEQEWDPRKAQAYAGIFHFH ASIKAVTAADMEARLACGLVKGHAY LHGAWTLHEDPRQNRGGGCINHKDT FTDVPSNCRELRLDKPPHTCWSSLC SRQPSNLPGTVAVHILSSTSLMAV

AIPNHKDQEWDPRKPEKYAGIFHFR CCSIESPSQEEQEVETDWGLLKGYT GCWTVDDDPLMNRSGGCYNNRDTFL FSEVPVQLRELTLDMPKMSCWNLAR KGGPTAKVKQGHISFKVISSDDLTE

KRPPEICENPRFIIDGANRTDICQG EDFTGGVAEFFEIRDAPSDMYKIMK NPWGQVEWNGSWSDRWKDWSFVDKD KNRRKDRKLGASLFTIGFAIYEVPK GVDQESEEGKGKTSPDKQKQSPQPQ YEMRNAVNDAGFHLNNQLYDIITMR



HPHOVED (J.G. F.G.,
BY CLASS SUBCLASS
RAFTSMAN

FWRLG AVTDV FFQNP GYPQL 639

FWHFG YTMTD QNPQY GYPKV L 641

ELGDC KAIER EKARL EMHGN PGSSD YADKH



hCAPN9

MPYLYRAPGPQAHPVPKDARITHS
IFHFQFWQHSEWLDVVIDDRLPTF
TGIDQVSFRGQRIELIRIRNPWGQ
DEGQEECSFLVALMQKDRRKLKRF
TEEEQRFRALFEQVAGEDMEVTAE
LDFDDFLNCLVRLENASRVFQALS

hCAPN1

MSEEIITPVYCTGVSAQVQKQRAR LLHRVVPHGQSFQNGYAGIFHFQL DMEAITFKKLVKGHAYSVTGAKQV PATFWVNPQFKIRLDETDDPDDYG KSAGTVELDDQIQANLPDEQVLSE SAGFKLNKKLYELIITRYSEPDLA

hCAPN2

MAGIAAKLAKDREAAEGLGSHERA
SFQENYAGIFHFQFWQYGEWVEVV
VKGHAYSVTGAEEVESNGSLQKLI
LIKLEEEDEDEEDGESGCTFLVGL
EANLEEFDISEDDIDDGVRRLFAQ
IVARFADDQLIIDFDNFVRCLVRL

FIG. 5G



SGQSFEQMRQECLQRGTLFEDADFPRDRLVFLHSADHNEFWSALLEKAYAVEWNGSWSDSSPEWRSVGPAEQKRLGANVLTIGYAIYECPDKDEHLNKDFELEYVLNAVLQKKKDIKFKKLSLISTKNKEFIHLNINEFIHLTMNI 690

ELGLGRHENAIKYLGQDYEQLRVRCWQFGEWVDVVVDDLLPIKDGKLVFVNYRGQVVSLIRMRNPWGEVEWTGAWDRESGCSFVLALMQKHRRRERRFGREIDENFKALFRQLAGEDMEISVKEVDFDNFVCCLVRLETMFRFFKTLDT

IKYLNQDYEALRNECLEAGTLFQDP VDDRLPTKDGELLFVHSAEGSEFWS RIRNPWGEVEWTGRWNDNCPSWNTI IQKHRRRQRKMGEDMHTIGFGIYEV LAGEDAEISAFELQTILRRVLAKRQ ETLFKIFKQLDPENTGTIELDLISW

FIG. 5H





SGQSFEQMRQECLQRGTLFEDADFPRDRLVFLHSADHNEFWSALLEKAYAVEWNGSWSDSSPEWRSVGPAEQKRLGANVLTIGYAIYECPDKDEHLNKDFELEYVLNAVLQKKKDIKFKKLSLISTKNKEFIHLNINEFIHLTMNI 690

ELGLGRHENAIKYLGQDYEQLRVRC WQFGEWVDVVVDDLLPIKDGKLVFV NYRGQVVSLIRMRNPWGEVEWTGAW DRESGCSFVLALMQKHRRRERRFGR EEIDENFKALFRQLAGEDMEISVKE VDFDNFVCCLVRLETMFRFFKTLDT

IKYLNQDYEALRNECLEAGTLFQDP VDDRLPTKDGELLFVHSAEGSEFWS RIRNPWGEVEWTGRWNDNCPSWNTI IQKHRRRQRKMGEDMHTIGFGIYEV LAGEDAEISAFELQTILRRVLAKRQ ETLFKIFKQLDPENTGTIELDLISW

FIG. 51



ASNSSLFYSERPQIPFVWKRPGEIV KLNGSYEALKGGSAIEAMEDFTGGV CHTALDDGEFWMAFKDFKAHFDKVE FRYHASRARSKTFINLREVSDRFKL CKNIISLMDTSGNGKLEFDEFKVFW

LQSGTLFRDEAFPPVPQSLGYKDLG
HSAEGNEFWSALLEKAYAKVNGSYE
SDSSSEWNNVDPYERDQLRVKMEDG
DMETIGFAVYEVPPELVGQPAVHLK
LRTILNRIISKHKDLRTKGFSLESC
DLDGVVTFDLFKWLQLTMFA 714

SFPAIPSALGFKELGPYSSKTRGMR ALLEKAYAKINGCYEALSGGATTEG DPEERERLTRRHEDGEFWMSFSDFL PEELSGQTNIHLSKNFFLTNRARER DIKSDGFSIETCKIMVDMLDSDGSG LCFSVL 700

FIG. 5J





BY CLASS SUBCLASS

KNPEFILGGATRTDICQGELGDCWLAETFQTKEAPENFYEILEKALKRGSICNLTPDALEEDAIHKWEVTVHQGSPGEYILIPSTFEPHQEADFCLRIFDKLKQWINLFLRFDADKSGTMSTYE

PNSSKTYGIKWKRPTELLSNPQFIV
ALSGGSTSEGFEDFTGGVTEWYELR
EFWMSFRDFMREFTRLEICNLTPDA
RDFFLANASRARSEQFINLREVSTR
RSMVNLMDRDGNGKLGLVEFNILWN

WKRPTEICADPQFIIGGATRTDICQ FEDFTGGIAEWYELKKPPPNLFKII RHYSRLEICNLTPDTLTSDTYKKWK SDTFINLREVLNRFKLPPGEYILVP KLGLKEFYILWTKIQKYQKIYREID



LAAIASLTLNQKALARVIPQDQSFG LLGCFIDTRSAAESEARTPFGLIKG WVRGSTAGGCRNFLDTFWTNPQIKL SEKKAITRDMDGNVDIDLPEPPKPT LRTALKAAGFQLSSHLLQLIVLRYA

DGATRTDICQGALGDCWLLAAIASL KAPSDLYQIILKALERGSLLGCSID LKSRTIRKWNTTLYEGTWRRGSTAG FRLPPGEYVVVPSTFEPNKEGDFVL RIRNYLSIFRKFDLDKSGSMSAYEM

GALGDCWLLAAIASLTLNEEILARV QKALQKGSLLGCSIDITSAADSEAI LTKMDGNWRRGSTAGGCRNYPNTFW STFEPNKDGDFCIRVFSEKKADYQA VDRSGTMNSYEMRKALEEAGFKMPC



APPICVED O.G. FIG.
BY CLASS SUBCLASS
DRAFTSMAN

PGYAG HAYSV SLTEK PPDQE DEELQ

TLNDT ISSVL GCRNY RFFSE RMAIE

VPLNQ TFQKL MNPQY VDDEI QLHQV

FIG. 5M



PROVED O.G. P. V.
BY. CLAUS SUBCLASS

rCAPN8
MAALAAGVSKQRAVAEGLGSNQNA
SFQKDYAGIFHFQFWQYGEWVEVV
VKGHAYSVTGVEEVNFHGRPEKLI
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TVSGHPHEPHPRDMDEEDEHVRSL
QQTIAMRYACSKLGVDFNGFVACM

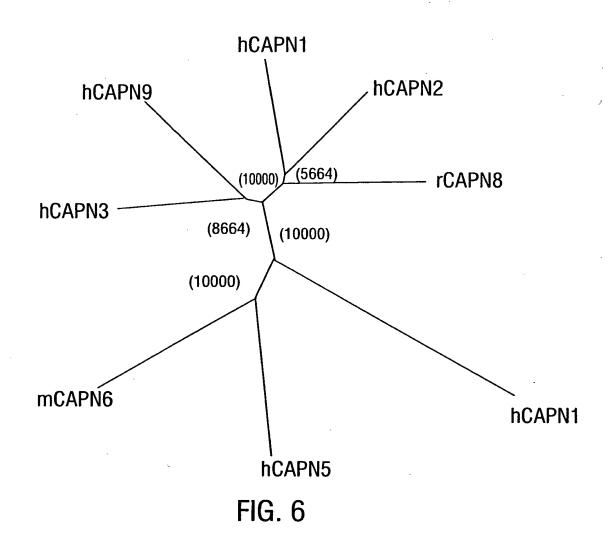
## hCAPN10

MRAGRGATPARELFRDAAFPAADS
CLAGRLCFSRCQREDVFWLPLLEK
LRIQNPWGRRCWQGLWREGGEGWS
HAADWAGRARALVGDSHTSWSPAS
VQLRGSWRVGQTAGGSRNFASYPT
IDRPSIHSQEMLGQFLQEVSVMAV

FIG. 5N

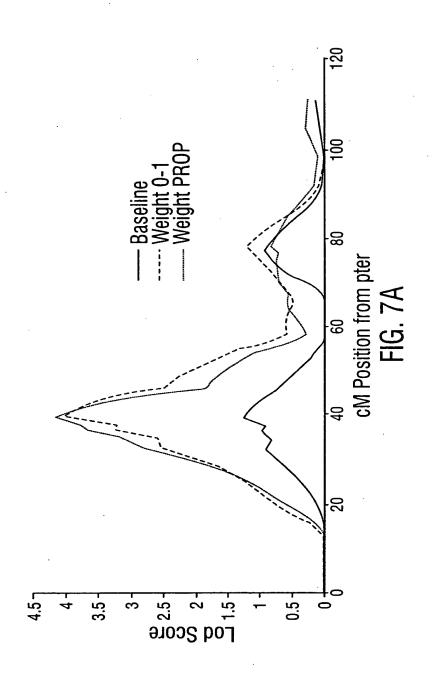




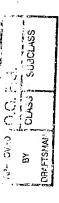


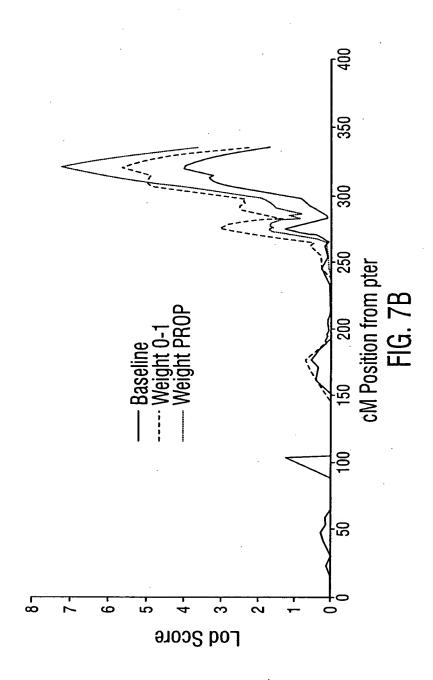








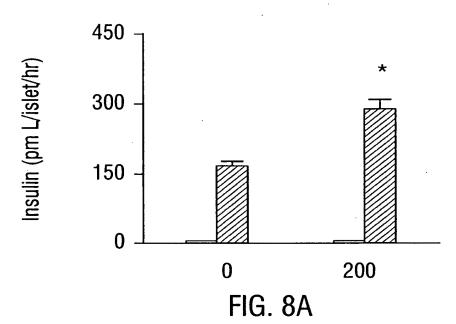


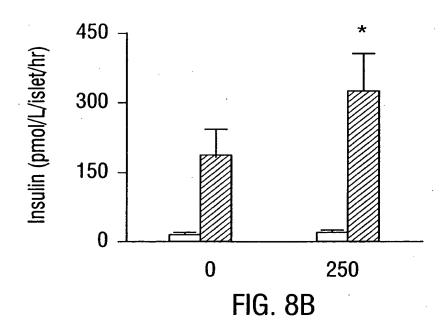




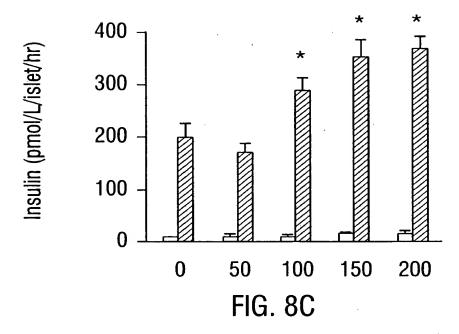


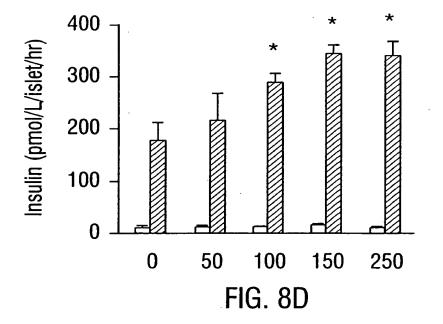


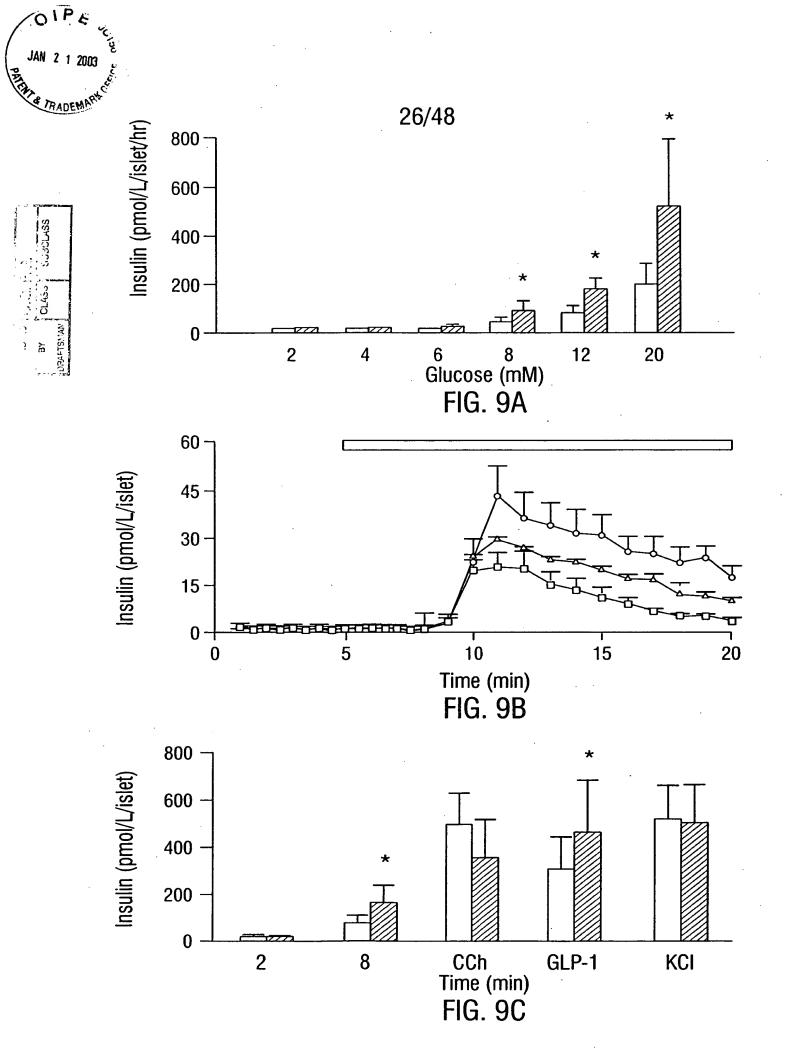
















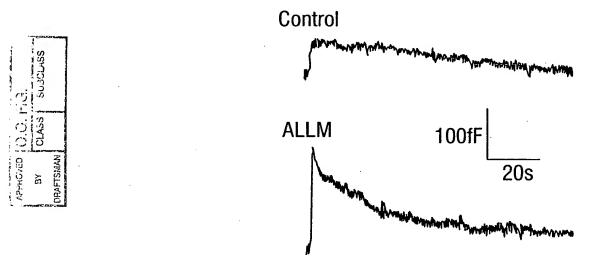
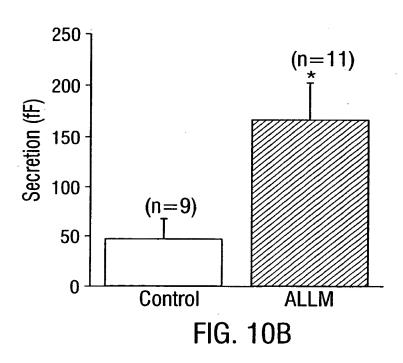
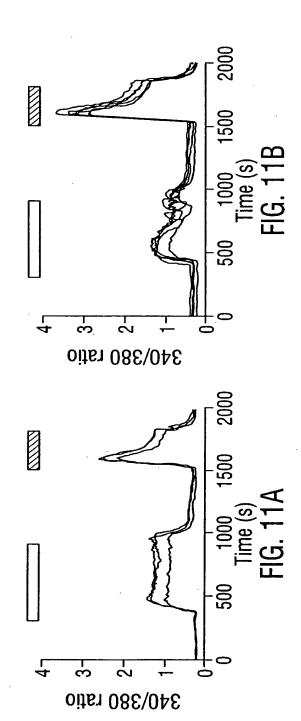


FIG. 10A

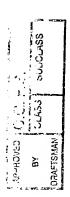


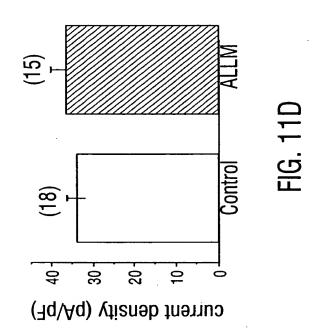








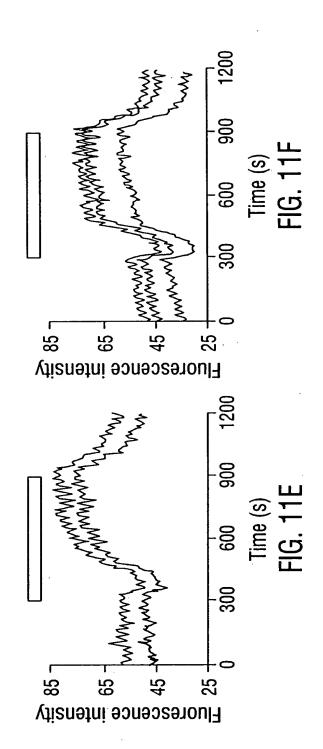




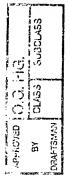
ALLM

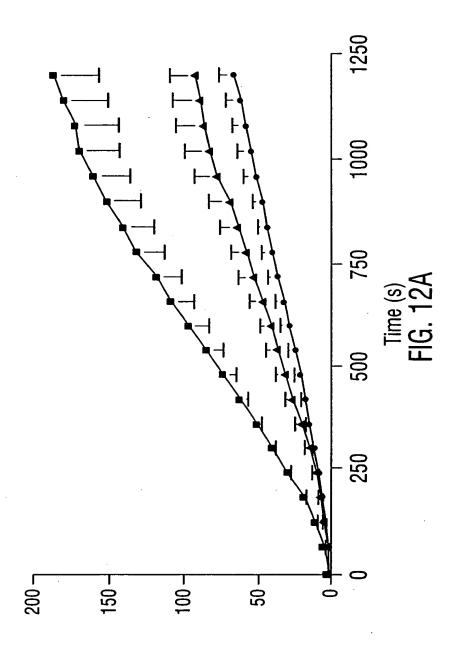
25ms FIG. 11C







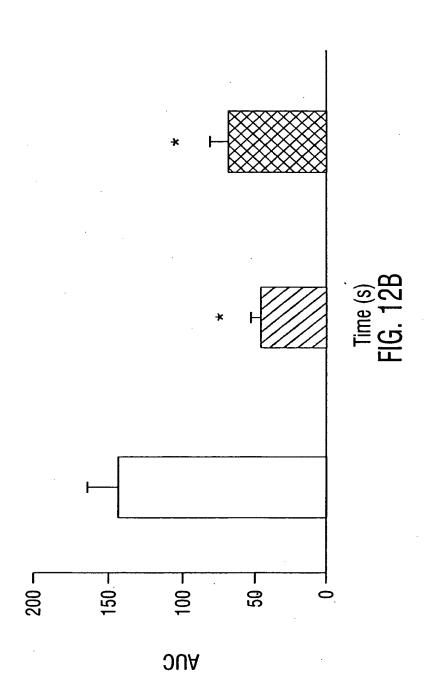




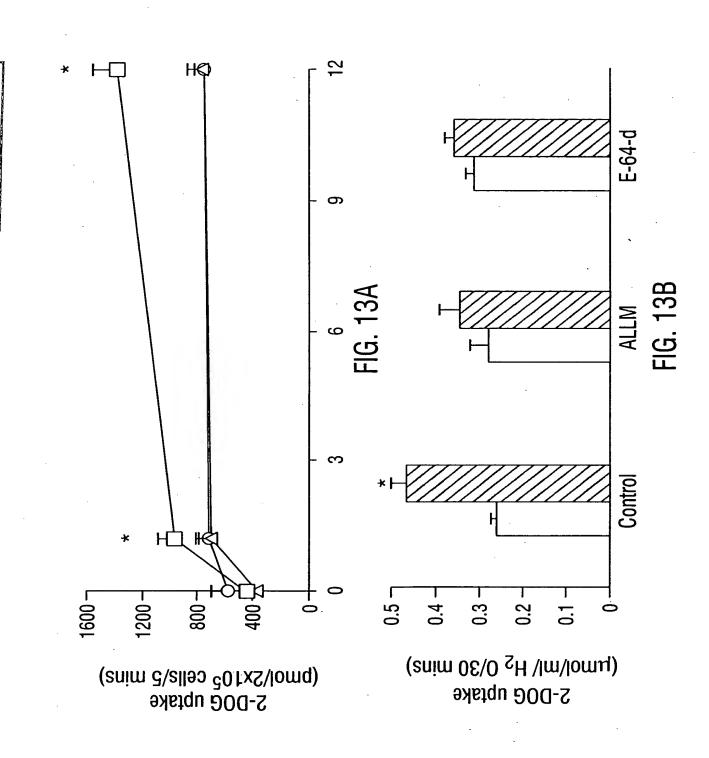
Fluorescence intensity



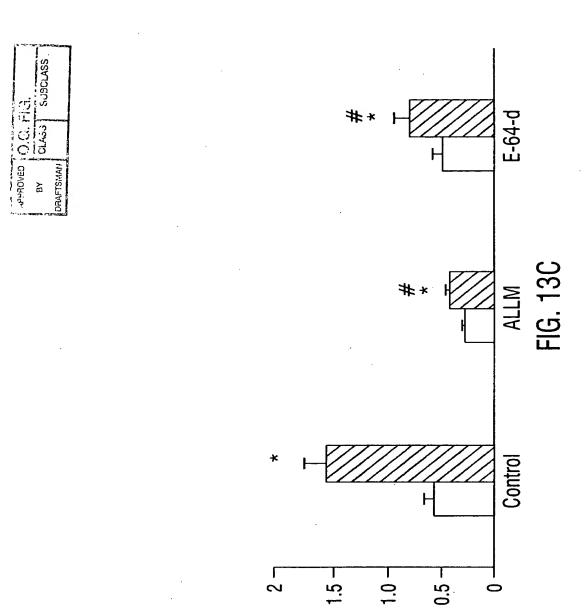






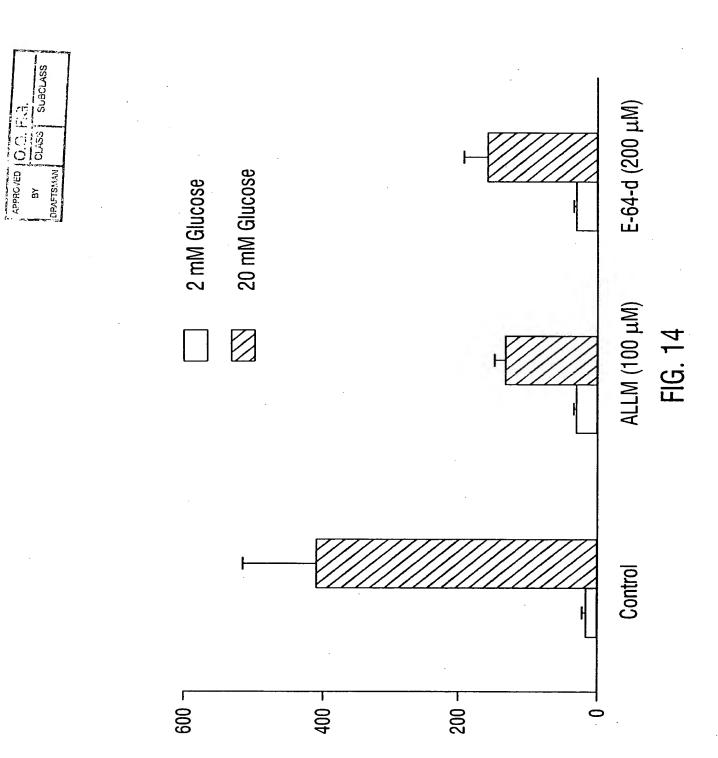




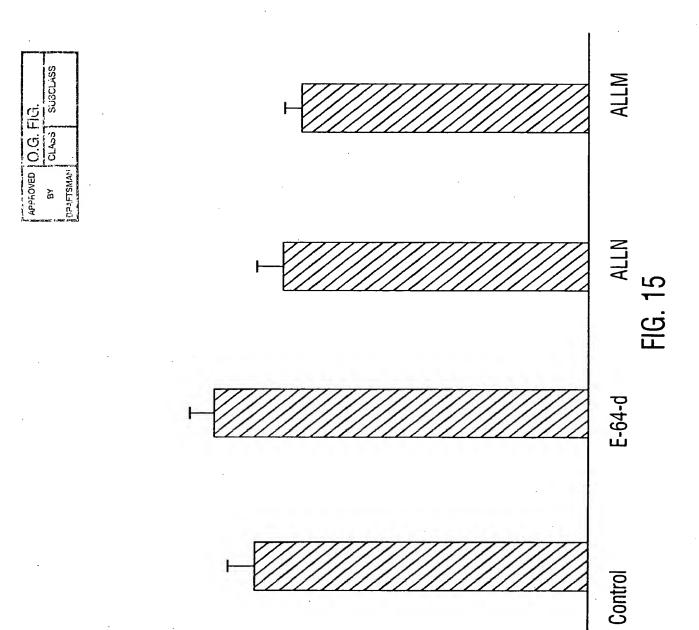


Glycogen syntehsis (nmol glucose/mg/hr)





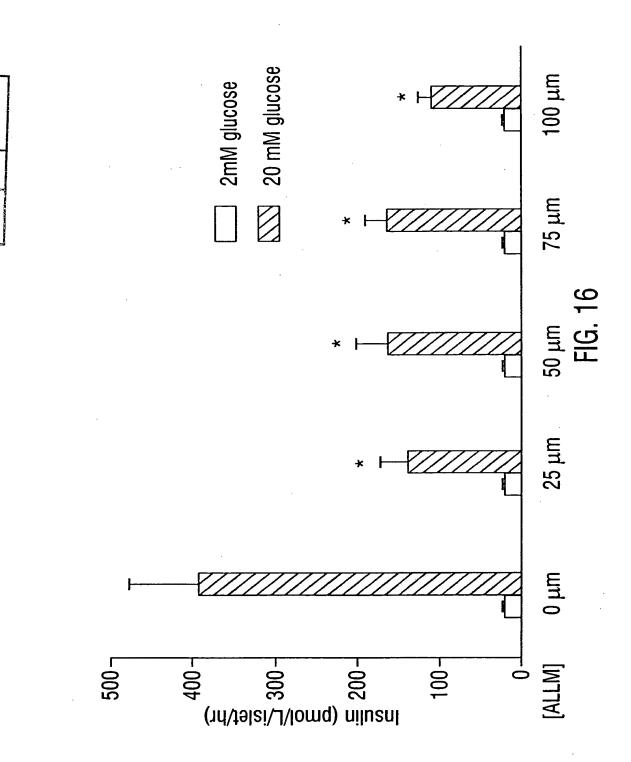


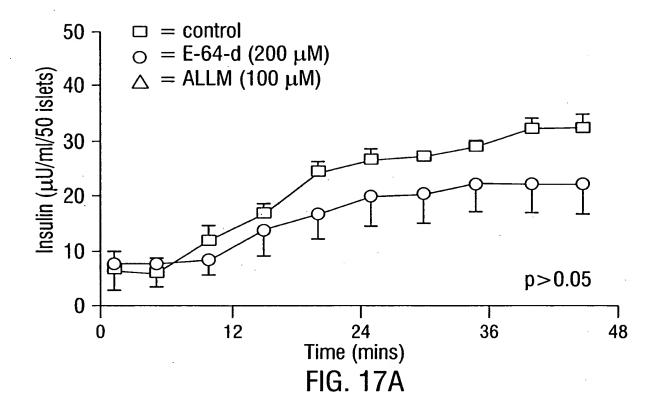


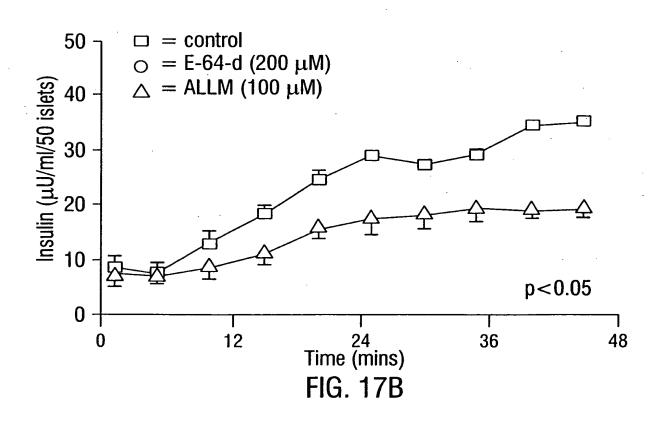
(stəlsi č\lm\U1) nilusnl



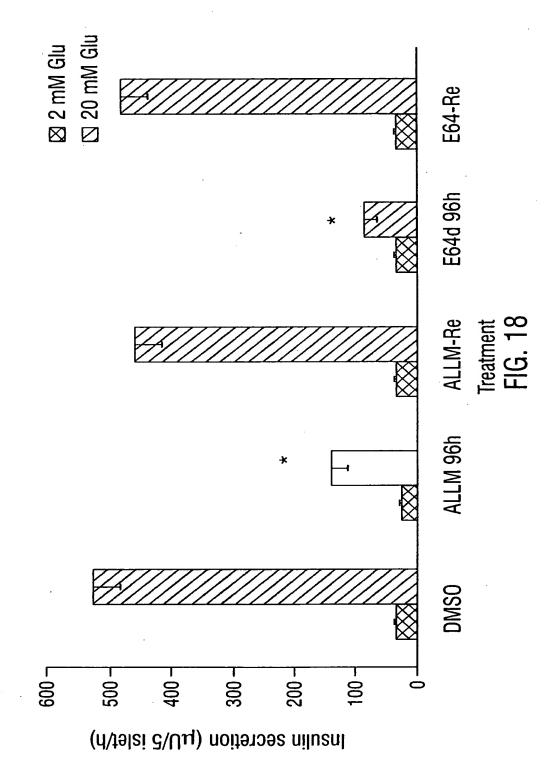
APP. GVED O.G. FIG.
BY CLASS SUBCLASS



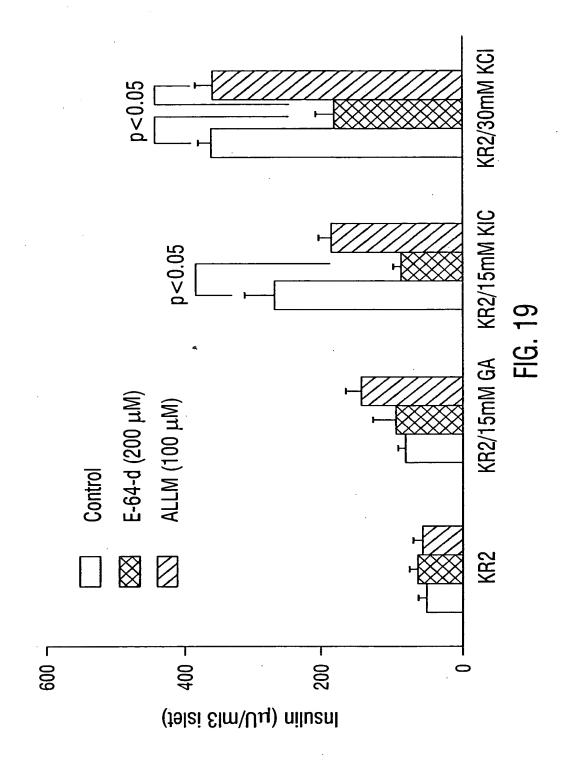




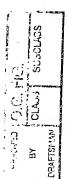


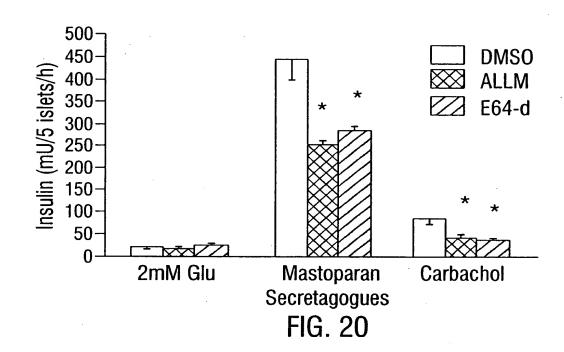




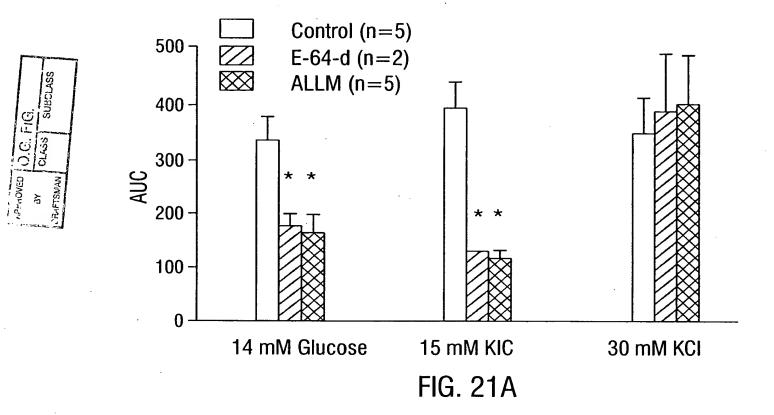


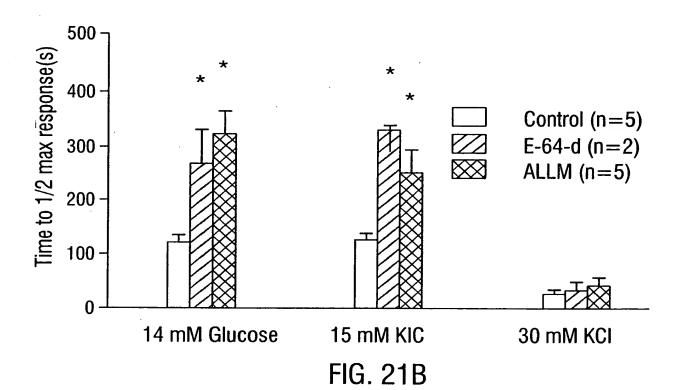






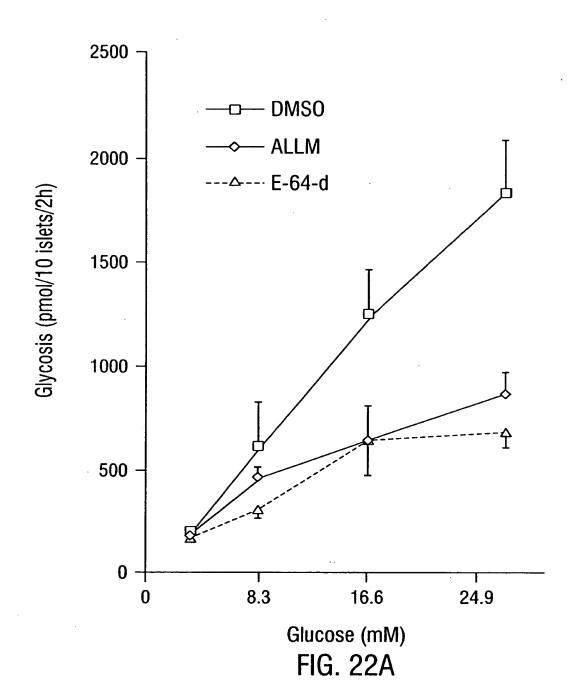
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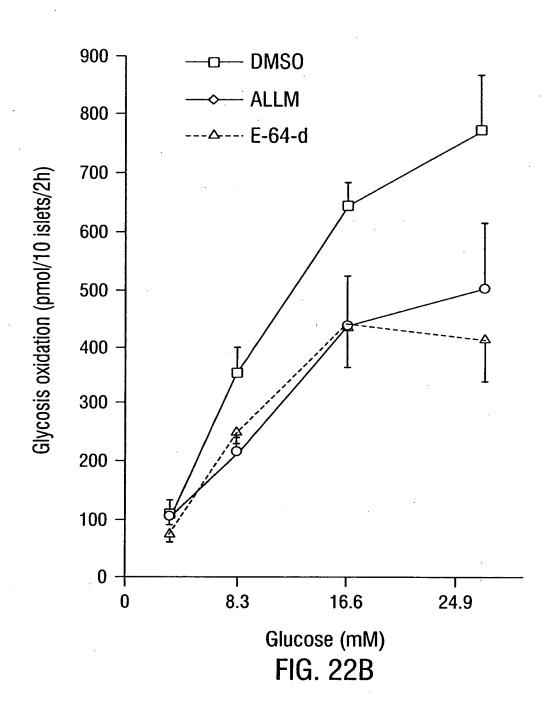




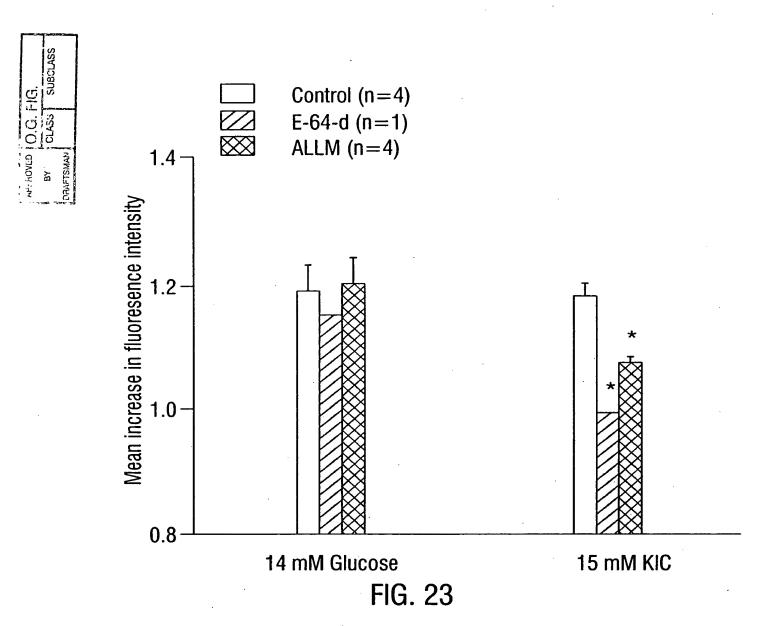




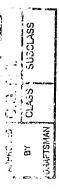


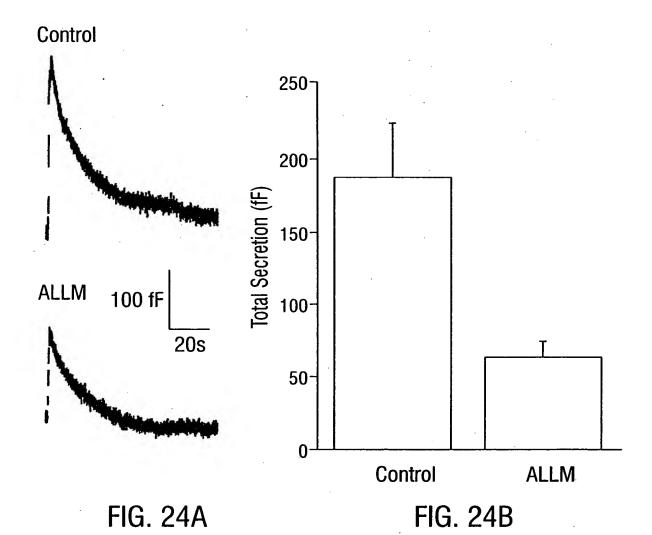






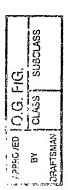




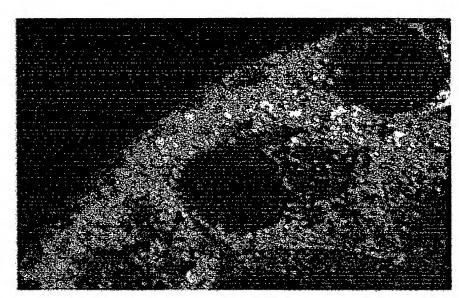




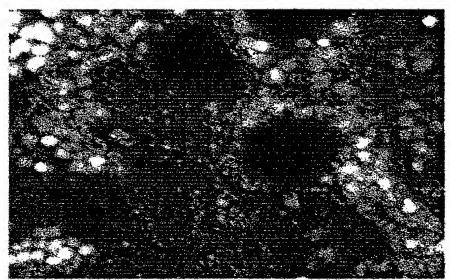
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DMS0 FIG. 25A



E64d FIG. 25A



ALLM FIG. 25A

